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EXAMINER

GAY, JENNIFER HAWKINS

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| ART UNIT | PAPER NUMBER |
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3672

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,639

Applicant(s)

AKERLUND, TOR JAN

Examiner

Jennifer H. Gay

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24, 50-55, 57, 60, 61 and 70-93 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24, 50-55, 57, 60, 61 and 70-93 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/16/05

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 8, 9, 12, 20-24, 50-55, 57, 60, 61, and 70-93 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 95/10686 (referred to hereafter as Lorenz).

Regarding claims 1, 50, 76, 77: Lorenz discloses an apparatus for positioning a tong proximate a tubular at a well center. The apparatus includes the following features:

- An extendable structure **101, 202, 203** with the tong **110** attached to one end thereof.
- An actuating member or motive assembly (5:29-35) for extending or retracting the extendable structure.
- A mounting assembly (Figure 1 of US 5,368,113 which is the US equivalent to EP 593803A, incorporated by reference in Lorenz) coupled to an opposite end of the extendable structure, wherein the mounting assembly is coupled to a support member **104** on a drilling tower **105**.

Regarding claims 2, 5, 57, 87, 88: The extendable structure is telescopic with an inner and outer barrel (Figure 4).

Regarding claims 3, 4, 53, 55: The extendable structure is capable of pivoting about a vertical and horizontal axis (Figure 3).

Regarding claims 8, 12: The mounting assembly includes a base **24** and a carriage **29** that is pivotally attached to the base. A portion of the outer barrel is disposed on the carriage.

Regarding claims 9, 24, 51, 81: The tong is movable attached to the inner barrel (Figure 4).

Regarding claim 20: The apparatus includes a motor 117 for adjusting the extendable structure with respect to the mounting assembly.

Regarding claims 21-23, 52, 82: The actuating member includes a piston and cylinder assembly that is disposed on the extendable structure for moving the structure horizontally.

Regarding claim 54: The extendable structure is slidable along the mounting assembly between a first and second position (Figure 4).

Regarding claims 60, 61: The center of mass of the tong is substantially aligned with an axis of the extendable structure.

Regarding claims 70, 83: Lorenz discloses a method for connecting a first tubular to a second using the above apparatus. The method involves the following steps:

- Providing the apparatus.
- Positing the apparatus on a drilling tower.
- Actuating the extendable structure to move the tong toward the well center.
- Engaging the first and second tubular with the tong.
- Connecting or disconnecting the tubulars.

Regarding claims 71, 72, 84, 85: The method further involves attaching the extendable structure to the drill tower via the support member.

Regarding claim 73: The tubulars are connected by rotating one relative to the other.

Regarding claims 74, 75, 78, 79, 85, 89-92: The mounting assembly is clamped to the support member on the drilling tower using bolts for coupling the extendable structure to the support member.

Regarding claim 80: Lorenz discloses all of the limitations of the above claims except for the support beam being located between 2 and 3 meters above the rig floor. However, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have placed the support beam of Lorenz between 2 and 3 meters from the rig floor, since it has been held that discovering an optimum value of a

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result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 93: The mounting assembly is coupled to the support beam so that the boom can position the tong proximate a connection of the tubulars.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lorenz in view of Swoboda, Jr. et al. (US 3,840,128).

Lorenz discloses all of the limitations of the above claims except for the boom including an intermediate barrel where the inner barrel is mounted in the intermediate barrel and the intermediate barrel is mounted in the outer barrel.

Swoboda, Jr. et al. discloses a wellbore tool positioning device similar to that of Lorenz. Swoboda, Jr. et al. further teaches using a boom with three barrels.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the device of Lorenz to include an intermediate barrel as taught by Swoboda, Jr. et al. in order to have extended the reach of the tong. The more barrels that the boom included, the further from the support member the boom could have reached.

5. Claims 1-5, 8-15, 18, 19, 21-24, 50-55, 57, 60, 61, and 70-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over McArthur (US 4,642,195) in view of Kelly (US 3,881,375).

Regarding claim 1: McArthur discloses an apparatus for positioning a wellbore tool for moving tubing joints. The apparatus includes the following features:

➤ A boom 130 with the tong 170 attached to the end thereof.

- An actuating member **150** for changing the length of the extendable boom.
- A mounting assembly **30** that is coupled to an opposite end of the extendable boom to couple the boom to a support beam **26** for coupling the extendable boom to a drilling tower **12**.

McArthur discloses all of the limitations of the above claims except for the tool being a tong capable of making up or breaking out tubulars.

Kelly discloses a movable wellbore tool that is a tong capable of making up or breaking out tubulars.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the apparatus of McArthur such that the tool was a tong as taught by Kelly in order to have eliminated the need for an operator to perform the separate step of making up or breaking out the tubulars once they are put into position.

Applicant is reminded that “[i]n considering in the disclosure of a reference, it is proper to take into account not only specific teachings of a reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” *In re Pedra*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

Regarding claims 2, 5: The boom is telescoping with an inner and outer barrel.

Regarding claims 3, 4, 18, 19: The boom of is movable both horizontally and vertically with respect to Figure 2.

Regarding claims 8, 12: The mounting assembly includes a base **32** with a carriage **38** pivotally attached to the base with a portion of the outer barrel disposed on the carriage (Figure 2).

Regarding claims 9, 24: The tong is movably attached to the inner barrel via a pivot **172, 174**.

Regarding claims 10, 13, 14: A clamp assembly **72** for releasable connecting the outer barrel to the carriage.

Regarding claim 11: The outer barrel is movable between a first and second position relative to the carriage.

Regarding claims 21-23: The actuating member includes a piston and cylinder assembly **150** disposed on the boom for moving the boom between an extended and retracted position.

Regarding claim 50: McArthur discloses an apparatus for positioning a wellbore tool for moving tubing joints. The apparatus includes the following features:

- A boom **130** with the tong **170** attached to the end thereof.
- A motive assembly **150** for changing the length of the extendable boom.
- A support beam **26** for coupling the extendable boom to a drilling tower **12**.

McArthur discloses all of the limitations of the above claims except for the tool being a tong capable of making up or breaking out tubulars.

Kelly discloses a movable wellbore tool that is a tong capable of making up or breaking out tubulars.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the apparatus of McArthur such that the tool was a tong as taught by Kelly in order to have eliminated the need for an operator to perform the separate step of making up or breaking out the tubulars once they are put into position.

Applicant is reminded that “[i]n considering in the disclosure of a reference, it is proper to take into account not only specific teachings of a reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” *In re Pedra*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

Regarding claims 51, 81: The tool is movably attached to the inner barrel via pivot points **172, 174**.

Regarding claims 52, 82: The motive assembly includes a piston and cylinder assembly **150**.

Regarding claims 53 and 55: The boom is movable both horizontally and vertically with respect to Figure 2.

Regarding claim 54: The boom is slidable along the mounting assembly between a first and second position.

Regarding claims 57, 87: The boom is telescopic.

Regarding claims 60, 61: As seen in Figure 2, the center of mass of the gripping assembly is aligned with the central axis of the boom.

Regarding claims 70, 83, 88: McArthur discloses a method for engaging a first and second tubular using the above apparatus. The method involves the following steps:

- Positioning the apparatus on a drilling tower.
- Actuating the extendable boom to move the tool toward the well center from a first to a second position by varying the length of the tool.
- Engaging the first and second tubulars with the tool.

McArthur discloses all of the limitations of the above claims except for the tool being a tong capable of making up or breaking out tubulars.

Kelly discloses a movable wellbore tool that is a tong capable of making up or breaking out tubulars.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the apparatus of McArthur such that the tool was a tong as taught by Kelly in order to have eliminated the need for an operator to perform the separate step of making up or breaking out the tubulars once they are put into position.

Applicant is reminded that “[i]n considering in the disclosure of a reference, it is proper to take into account not only specific teachings of a reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” *In re Pedra*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

Regarding claims 71, 84, 92: A support member 26 is attached to the drilling tower.

Regarding claims 72, 84: The extendable boom is coupled to the support member.

Regarding claim 73: The tong of Kelly connects a first and second tubular by rotating the first relative to the second.

Regarding claims 74, 75: The mounting assembly is releasably clamped to the support member via bolts 36.

Regarding claim 76: McArthur discloses an apparatus for positioning a wellbore tool for moving tubing joints. The apparatus includes the following features:

- A boom 130 with the tong 170 attached to the end thereof.
- A motive assembly 150 for changing the length of the extendable boom.
- A mounting assembly 30 that is coupled to an opposite end of the extendable boom to couple the boom to a support beam 26 for coupling the extendable boom to a drilling tower 12.

McArthur discloses all of the limitations of the above claims except for the tool being a tong capable of making up or breaking out tubulars.

Kelly discloses a movable wellbore tool that is a tong capable of making up or breaking out tubulars.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the apparatus of McArthur such that the tool was a tong as taught by Kelly in order to have eliminated the need for an operator to perform the separate step of making up or breaking out the tubulars once they are put into position.

Applicant is reminded that “[i]n considering in the disclosure of a reference, it is proper to take into account not only specific teachings of a reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” *In re Pedra*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

Regarding claim 77: The beam is selectively attached to the drilling tower as any welded piece of metal can be removed from the parts it is attached to.

Regarding claim 78: The mounting assembly is clamped to the support beam that is convenient.

Regarding claim 80: McArthur discloses all of the limitations of the above claims except for the support beam being located between 2 and 3 meters above the rig floor. However, it would have been considered obvious to one of ordinary skill in the art, at the

time the invention was made, to have placed the support beam of McArthur between 2 and 3 meters from the rig floor, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 86, 89: The apparatus includes a mounting assembly **30** for coupling the boom to the support member.

Regarding claims 90, 91: The boom is clamped to the support beam using a plurality of bolts **36** (Figure 9).

Regarding claim 93: The mounting assembly is coupled to the support beam so that the boom can position the tong proximate a connection of the tubulars.

6. Claims 6, 7, 16, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over McArthur in view of Kelly as applied to claims 5 and 15 above, and further in view of Swoboda, Jr. et al.

Regarding claims 6, 7, 16, and 17: McArthur and Kelly discloses all of the limitations of the above claims except for the boom including an intermediate barrel where the inner barrel is mounted in the intermediate barrel and the intermediate barrel is mounted in the outer barrel.

Swoboda, Jr. et al. discloses a wellbore tool positioning device similar to that of Kelly. Swoboda, Jr. et al. further teaches using a boom with three barrels.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the device of McArthur in view of Kelly to include an intermediate barrel as taught by Swoboda, Jr. et al. in order to have extended the reach of the tong. The more barrels that the boom included, the further from the support member the boom could have reached.

Regarding claim 20: McArthur and Kelly discloses all of the limitations of the above claims except for to apparatus including a motor.

Swoboda, Jr. et al. further teaches using a motor to **90** to adjust he position of the boom relative to a mounting assembly.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the apparatus of McArthur in view of Kelly to include a motor as taught by Swoboda, Jr. et al. in order to have provided a means for controlling the hydraulic actuating pistons automatically and without operator intervention.

Response to Arguments

7. In view of applicant's amendment, the objection to the drawings has been withdrawn.
8. In view of applicant's arguments against the 35 USC 112(1) rejection of the claims, the rejection has been withdrawn.
9. Applicant has argued that Kelly does not teach coupling an extendable structure to a support member on a drilling tower. The examiner agrees with this assessment and has withdrawn the rejection of claims 1-24, 60 74, and 75 over Kelly in view of Swoboda, Jr. et al.
10. Applicant's arguments filed 02 August 2005 have been fully considered but they are not persuasive.

Applicant has argued that Kelly does not teach positioning the tong assembly on a derrick. The examiner agrees but notes that applicant is arguing Kelly as if applied under 35 USC 102 instead of 35 USC 103. McArthur teaches a tubular positioning apparatus that is located on a support member of a derrick.

Applicant has argued that does not teach making up or breaking out tubulars. The examiner agrees but again notes that application is arguing the reference as if applied under 35 USC 102. Kelly has been used to teach a wellbore apparatus for making up or breaking out tubulars.

Applicant has further argued that McArthur teaches away from combination with Kelly because it teaches using a separate wrenching apparatus to make up the tubulars instead of the stabbing apparatus. While a separate wrenching apparatus is taught, it is this teaching that leads to the motivation for combining the references as a positionable tong would eliminate the need for a separate wrenching apparatus.

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Regarding the arguments against the rejection of claims 50, 70, 76, 77, 80, 83, and 93, applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. The mere recitation of the claim language as what the applied references do not teach is not considered to be adequate arguments against the application of those references to reject the claims.

Applicant has argued that the applied references do not teach or suggest the support beam being located between 2 and 3 meters above the rig floor. While the examiner acknowledges that the references do not teach this specifically, the placement of the support beam would be well within the skill of one of ordinary skill in the art to determine thus is considered to be obvious.

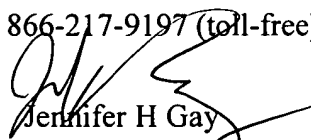
Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H. Gay whose telephone number is (571) 272-7029. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JHG
September 8, 2005


Jennifer H Gay
Patent Examiner
Art Unit 3672